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| 10/510,299 | 04/26/2005 | Andries Wageningen Van | 853563.439USPC | 6515 |

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| EXAMINER | |
|---|---|
| PHAM, TITO Q | |
| ART UNIT | PAPER NUMBER |
| 2419 | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/510,299 | WAGENINGEN VAN ET AL. | |
| | Examiner | Art Unit | |
| | TITO PHAM | 2419 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *amendment filed on December 24, 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16 and 18-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. This communication is in response to amendment filed on December 24, 2008. Claim 17 has been cancelled. Claims 18-21 have been added. Claims 1-16, 18-21 are pending.

### *Claim Objections*

2. Claim 1 is objected to because of the following informalities: no transitional phrase in the claim. In line one, the word "comprising" after "a method" is missing. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9, 16, 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 16 are rejected for the following reasons,

(1) Lines 11-12 recite the limitation "said configurations." While the claim previously recites "configurations" the previous use of this term does not set forth any particular configurations that could be used to provide antecedent basis for the term "said configuration."

(2) In line 11-13, the claim recites "wherein changing configurations includes oscillating said configurations between a loopback configuration and a no-transmission configuration during a set up period". In lines 6-7, the claim

recites "changing configurations of said cross-connection circuit between cell transfer periods in cross-connection configuration periods." It is unclear how the changing configuration step, which takes place between cell transfer periods, can include changing configurations during a set-up, which takes place prior to any cell transfer period.

(3) In line 14, it is unclear what constitutes "received cells". In lines 10, the claim specifies "receiving said sent cells in said cross-connection means", where the sent cells are sent during a cell transfer period such that the received cells are received during a cell transfer period. However, the received cells in line 14 must be different than the received cells in line 10 because the received cells in line 14 are received during a loopback configuration that takes place in a set up period.

(4) It is unclear whether the receiving, checking, and shifting steps of lines 18-23 only take place during a loopback period or at other times. From the Specification, it seems that these steps only occur during a loopback period; however, this is not specified in the claims.

Claims 2-9, 18, and 19 are rejected because of their dependency to claims 1 and 16.

Claim 20 recites the limitation "said cross-connection means" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 is rejected because of its dependency on claim 20.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 10-15, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dally (US Pat. No. 7,260,092) in view of Caldara (US Pub. No. 2001/0033572) in view of Takigawa et al. (US Pat. No. 5,265,088).

Regarding **claims 10 and 20**, Dally discloses a packet switch comprising:

a plurality of port controllers (figure 10 Stage chip) each with a cell input port and a cell output port (see figure 10),

cross-connection means cell input ports and cell output ports connected to said cell output ports and cell input ports of said port controllers, respectively (see figure 10 and 11),

port controller of said port controllers comprises:

start of cell signal generator for generating start of cell signals (column 10 lines 35-48)

an offset controller for shifting a start of cell time based on said start of cell signal (column 10 lines 35-48).

Dally does not teach an error detection means for detecting corrupt received cells. However, Caldara discloses a cell error detecting circuit (figure 3 SIPO 375, paragraph 101). Therefore it would have been obvious to one with

ordinary skill in the art at the time of the invention to implement in Dally an error detection means. The motivation is to isolate error cells (paragraph 101).

Dally further teaches oscillating between a transmission mode and no-transmission mode (abstract, figure 7-10, figure 23 config 0 and 1, column 7 lines 14-54, configuration changes to synchronized align frame).

Dally and Caldara do not teach loopback configuration for transmission. However, Takigawa discloses a loopback transmission (abstract). Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to implement in Dally and Caldara a loopback configuration. The motivation is to detect error in monitored/OAM cell (abstract).

Regarding **claims 11 and 21**, all limitations in claims 10 and 20 are disclosed above. Caldara further teaches a central clock generator for providing a central clock signal, said start of cell signal generator, said offset controller, and said configuration controller each comprise an input port for said central clock signal (figure 3, clock control)

Regarding **claim 12**, all limitations in claim 10 are disclosed above. Caldara further teaches wherein said sending port controller comprises a serialiser and a de-serialiser for serialising cells to be sent and deserialising received cells (see figure 3).

Regarding **claim 13**, all limitations in claim 10 are disclosed above. Dally further teaches an NxN crossbar marix (see figure 5).

Regarding **claim 14**, all limitations in claim 13 are disclosed above. Takigawa discloses said loopback configuration is realized by a unit matrix

(abstract). Dally discloses a non-transmission configuration is realized by a null matrix (abstract, figure 7-10, figure 23 config 0 and 1, column 7 lines 14-54, configuration changes to synchronized align frame).

Regarding **claim 15**, all limitations in claim 10 are disclosed above. Caldara further teach error detection means is a bit error indicator (paragraph 101, CRC check).

***Allowable Subject Matter***

7. Claims 1 and 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. Claims 2-9, 18, 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TITO PHAM whose telephone number is (571)272-4122. The examiner can normally be reached on Monday-Friday 9AM-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Ryman can be reached on 571-272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP

/Daniel J. Ryman/
Supervisory Patent Examiner, Art Unit 2419